REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion is respectfully requested.

Claims 55-78 are currently pending in the application; Claims 55-65, 68, 70, 72, 74, 76 and 78 having previously been withdrawn from consideration. Claims 66, 67, 75 and 77 are amended by the present amendment. Support for the amended claims can be found in the original specification, claims and drawings.[1] Thus, no new matter is presented.

In the outstanding Official Action, Claims 66, 67, 71, 73, 75 and 77 rejected under 35 U.S.C. § 102(b) as anticipated by Yamauchi et al. (U.S. Patent No. 5,651,542, hereinafter "Yamauchi"); and Claim 69 was indicated as allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant appreciatively acknowledges the indication of allowable subject matter. However, since Applicant considers that amended independent Claim 66 patentably defines over the applied references, Claim 69 is presently maintained in dependent form.

In response to the rejection of Claims 66, 67, 71, 73, 75 and 77 rejected under 35 U.S.C. § 102(b) as anticipated by Yamauchi, Applicant respectfully submit that amended independent Claims 66, 67, 75 and 77 state novel features clearly not taught or rendered obvious by the applied reference.

Specifically, independent Claim 66 recites, *inter alia*, an image forming apparatus comprising:

> ...a sheet feeding device configured to convey a sheet ... said sheet feeding device includes a feed roller and a separation member, said separation member being pressed against and into contact with said feed roller with a pressure applied between said feed roller and said separation member, wherein a plurality of the sheets conveyed between said feed roller and said separation member are separated and conveyed one by one to said image forming device; and

[1] E.g., specification, Fig. 17, and p. 12. line 21-p. 13, line 16.

> a pressing device configured to ***cyclically provide a change in the pressure applied between said feed roller and said separation member while conveying a sheet between said feed roller and said separation member...***

As described, in an exemplary non-limiting embodiment at p. 12, line 21-p. 13, line 16, and Fig. 17 of the originally filed specification, "cyclically" is defined as "a constant repetition", which may, for example, be indicated by curve 22 of Fig. 17. An advantageous effect of loosening the paper fed between the feed roller and the separation member is obtained using a pressing cycle of a low frequency, several hundred Hz for example, while feeding the paper between the feed roller and separation member. Thus, as recited in amended independent Claims 66, 67, 75 and 77, the pressing device is configured to ***cyclically provide a change in the pressure applied between said feed roller and said separation member while conveying a sheet between said feed roller and said separation member.***

Turning to the applied reference, Yamauchi describes a paper feeder including a feed roller and a reverse roller, with varying amounts of pressure applied therebetween.[2] Specifically, Fig. 22 depicts a feed roller (12) and a reverse roller (13) paired together, and the reverse roller (13) is supported by an urging lever (15) urged upward by a spring (54). The lower end of the spring (54) is supported by a pivotable lever (53), and the lower surface of the pivotable lever (53) is engaged with a cam (52), which is rotated by a pulse motor (51).[3] The rotation of the cam (52) with the motor (51) causes the lever (53) to pivot upward or downward, thereby varying the contact pressure on the urging lever (15) of the reverse roller (13), and directly changing the contact pressure between the feed roller (12) and the reverse roller (13).[4]

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[2] Yamauchi, Abstract.
[3] Id., col. 12, lines 47-58.
[4] Id.

However, the change of pressure in Yamauchi does not occur ***cyclically***, "at a constant repetition", and does not change ***while conveying a sheet between said feed roller and said separation member***, as recited in amended independent Claims 66, 67, 75 and 77.

Specifically, Figs. 23-24 of Yamauchi describe the specific timing of the change in pressure between the feed roller (12) and the reverse roller (13). If the sheet front end has exited the feed and reverse rollers and entered the conveying rollers (18), the pulse motor (51) is rotated to lower the force urging the reverse roller (13) against the feed roller.[5] When a sheet newly enters the nip between the feed roller (12) and the reverse roller (13), the pulse motor (51) is rotated to increase the force urging the reverse roller (13) against the feed roller (12).

Thus, the pressing device of Yamauchi provides a change in the pressure asserted by the reverse roller (13) against the feed roller (12). However, the change is pressure is based on a sensor which detects that the paper has entered or exited the nip formed by the reverse and feed rollers, and is not a ***cyclic change***, as recited in the pending independent claims. Instead, as depicted in Fig. 24, the change in contact pressure in Yamauchi is based on two sensors (SW1 and SW2), and is not performed ***cyclically***, "at a constant repetition".

Similarly, Yamauchi describes that when paper is fed between reverse roller (13) and the feed roller (12), the pulse motor is rotated to "increase contact pressure", and this pressure is reduced when the paper exits the nip created between the rollers. Thus, when the paper is conveyed between the rollers, the pressure is maintained at a constant increased pressure. In contrast, the amended independent claims recite cyclically providing a change in the pressure applied between said feed roller and said separation member ***while conveying a sheet between said feed roller and said separation member***. As discussed above, the advantage of providing a pressure change while the paper is between the feed roller and the separation

[5] Id., col. 12, line 62-col. 13, line 1.

member is discussed, for example, at p. 13, lines 4-16 of the specification, and such a pattern of applied pressure is indicated, for example, by the curve 22, shown in Fig. 17. Yamauchi clearly fails to teach or suggest this claimed feature, as the pressure applied to the reverse roller is constant, and does not vary in a cyclic manner, as recited in the pending claims.

Therefore, Yamauchi fails to teach or suggest a pressing device is configured to ***cyclically provide a change in the pressure applied between said feed roller and said separation member while conveying a sheet between said feed roller and said separation member***, as recited in independent Claim 66.

Accordingly, Applicant respectfully requests that the rejection of Claim 66 (and the claims that depend therefrom) under 35 U.S.C. § 102(b) be withdrawn. For substantially the same reasons as given with respect to amended Claim 66, it is also submitted that amended Claims 67, 75 and 77 patentably define over Yamauchi.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 66, 67, 69, 71, 73, 75 and 77 is patentably distinguishing over the applied references. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

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